

Application No. 10/527,241
Amendment Dated: June 18, 2009
Reply to Office Action of: December 22, 2008

REMARKS/ARGUMENTS

Applicant has removed the claim amendments submitted in Response After Final Action dated April 15, 2009 which Response was not entered by the Examiner.

Applicant has amended claims 1, 2, 29, and 30 of the claims in issue considered by the Examiner in the Final Office Action dated December 22, 2008. Upon entry of the response and of the amendments, claims 1-25 and 27-30 are pending for reconsideration by the Examiner.

Upon further reflection, Applicant has amended the claims to better define the invention. Specifically, the amendments are concerned with a height of a moulded contact surface in Claims 1, 2, 29 and 30, new limitations concerning mouse operation in Claim 2, and some grammatical corrections.

The amendatory language inserted into claims 1, 2, 29, and 30 now clearly patentably distinguishes the claims over the Adler reference.

Applicant respectfully submits that no additional search is required and the remarks are solely directed to the positions taken by the Examiner as to the meaning and proper interpretation of the claims of record and the cited Adler reference.

Reconsideration of the Examiner's final rejection is respectfully requested in view of the following remarks.

The scope of the present invention is a computer mouse with ergonomically **formed** and **positioned** actuators; or as it is described in the specification, paragraph 0036 (emphasis added):

“A **key feature** of present invention is **the presence of moulds** 117 and 118, which form fingertip receptacles on the upper surface of the primary and secondary button, respectively.”

The term “mould” is mostly, 44 times, used in the specification while the term “receptacle” is used only 13 times and mostly in the context “**moulds or receptacles**” in paragraphs 0011, 0034, 0056, 0057, or “an inside form of the **mould forms a receptacle**”, in paragraphs 0013, 0032.

In the claim language and in the specification of the prior art is used only the term “Mulde” - “mould.”

Further, the terms a receptacle and a mould have the same common meaning - “*a container*,” specifically, a mould means - “*a hollow container with a particular shape*.” (Oxford Dictionary)

By deleting the broad term “receptacle” in the claim language could be avoided the use of the word structure such “a primary **container** extending ... from ... said primary button and forming a **container with a particular shape**.”

The term “**mould**” defines more specifically the **form of the angled upper surface of the button** of the present invention; therefore the use of the only term “mould” in the claim language could improve it without changing the scope of the invention.

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None of the references cited or identified by the Examiner, it is respectfully submitted, remotely disclose, taught, or suggest a **form of the upper surface of the mouse button** or a **moulded component attached to the upper surface of the button**, which might provide a moulded contact surface with a fingertip, which might allow the user to move the mouse by the fingers motions or actuate the button in the way disclosed in the present invention.

The Examiner has rejected Claims 1-13, 24 and 27 -30 under 35 U.S.C. §102 as being anticipated by Adler (US Patent 6,256,015 B1). Applicant respectfully traverses the rejections.

The Adler reference cited by the Examiner concerns a computer mouse cover mounted on mouse of a known type.

Adler teaches: *"A novel mouse cover that helps to protect the mouse from penetration by dirt, lint, oil, and moisture from the user' hand"* (Column 1, Lines 45-43); and further: *"In use, the cover fits closely over the mouse to completely cover its upper surface"* (Column 2, Lines 24-26 emphasis added).

The scope, spirit and teaching of Adler's disclosure are to provide the protective cover for a conventional mouse, which is matched to the configuration of the mouse body with minimized space between its and which is fabricated from materials like: *"one of preferred materials is 20-guage (about 0.032 in. thick) sheet-stock of sterling silver"* (Adler, Column 6, Lines 33-34).

For this propose there is indeed no reason to use thick materials or enlarge substantially the space between Adler's cover and the mouse body.

In the final rejections, the Examiner refers to Adler's Figs. 1 and 6, which, as the Examiner asserts, show the apertures, which allow movement of the mouse, such as in the vertical direction since the fingers are placed into the grooves.

Adler illustrates in Drawing Fig. 7, the cross sectional view of Fig 6, and teaches (emphasis added):

*"A finger pad 166 is positioned on the arm 160 to **protrude through** a corresponding one of **the apertures** 144 in the cover 110 for **direct contact by** a corresponding one of the user's **finger tips**."* (Column 5, Lines 53-56, Figs. 6-7)

Fig. 7 shows somewhat a "mould" turned inside out. The finger pad 166 elevates above the upper edge of the aperture 144 at a height, which allows the user to actuate the button by the finger motion without any hindrance from the upper edge of the aperture in the cover.

The cover is attached to the mouse body, and therefore should be considered as a part thereof.

There is no "groove" or any structure illustrated in Figs. 6 and 7, which could resist the finger motion when stretching against such structure in order to move the mouse forward.

So, the Examiner's rejections relating to the use of the "groove" aperture 144 of Figs. 6-7 for the forward mouse movement by the user's finger, it is respectfully submitted, are improper.

The Adler reference does not fairly or properly disclose, teach, or suggest the use of the apertures in the cover to move the mouse by the user's finger motion.

This Adler deficiency is apparent from Claim 1 of Adler which explicitly claims: *the mouse to be moved about on a flat surface by the user's hand* (Column 7, Lines 20-21 emphasis added, and Fig. 2).

Adler teaches that the aperture in the cover functions to allow the user to depress, i.e. actuate, the mouse button by the finger motion downwards throughout the aperture without any hindrance from the cover.

In the preferred embodiment of Adler, the user's finger tip should be placed on the pad 49 of Figs. 3-5, which is attached to the upper surface of the button and situated in the center of the aperture 44, or as Adler teaches: "a *simple **pad** 166 without an arm 160 could be **attached to the upper surface** of a corresponding one of the buttons of the mouse such that **it protrudes upwardly through a corresponding aperture for direct contact** by a corresponding one of the **user's fingers***" (Column 6, Lines 17-22 emphasis added).

The only function of the aperture in the Adler cover attached to the conventional mouse is to allow depressing the mouse button by the user's finger motion downwards throughout the aperture, without any hindrance from the cover attached to the mouse body.

Consequently, the size of the aperture in the cover should provide the sufficient clearance around the finger tip placed on upper angled surface of the

button and the upper edge of the aperture to allow the necessary finger movement throughout the aperture by depressing the mouse button, so that the fingertip would not touch the upper edge of the aperture.

Or, as discussed above, a simple pad, identical to pad 49 or 166 having matching thickness, attached to the upper surface of the button "*such that it protrudes upwardly through a corresponding aperture*" could provide direct contact with the user's finger above the upper edge of the aperture.

Further, the cover *about 0.032 in. thick* is closely fit to the upper angled surface of the button, angled to the front end of the mouse. Around the user's finger placed on the angled upper surface of the button and the upper edge of the aperture must be provided with the sufficient clearance. By the finger motion forward, parallel to the working surface, the user's finger will doubtless not touch the upper edge of the Adler aperture.

Applicant respectfully submits that the apparent broad use of Fig. 1, which shows the empty cover in the exploded perspective view of the mouse, by the Examiner in the current rejections is improper.

The Examiner will appreciate that it is not the empty cover of Fig. 1 that will be moved by the user's finger placed into the aperture of the empty cover, but rather cursor movement is produced by the mouse with the Adler cover by the user's hand as illustrated in Fig. 2 and as described in Adler's claims.

Thus, as discussed above, the Adler reference does not disclose any contact surface of the aperture in the cover attached to the mouse with the user's

fingertip when placed on the upper surface of the mouse button and situated in the center of the aperture, which might be interpreted as a contact surface, nor likewise, a mould formed around the fingertip, which might resist the finger motion when stretching it against such surface to move the mouse forward.

Therefore, the Examiner's rejections based on the Adler use of "grooves" apertures in the Adler cover attached to conventional mouse for mouse moving by the fingers placed into the "grooves" - apertures, it is respectfully submitted, cannot be properly sustained.

One of the Applicant's claimed features is the form of the casing with spacings, which provide sufficient clearance between upper and rear surfaces of the mouse and the user's fingers, hand plane and heel of the hand when the user's hand rests on the working surface in the naturally relaxed curled fingers and hand position wherein only the user's index and middle finger tips are supported by the corresponding moulded contact surfaces of the mouse buttons (see Fig. 3, Claims 1,2, 8, 11, 12, and 13).

The length of the rear part of the mouse, measured from the front edge of the moulded contact surfaces of the primary and secondary buttons, is chosen to provide sufficient clearance between the rear surface of the mouse and the palm and heel of the hand, to thereby allow the user to move the mouse by flexing the user's index and middle finger from the naturally relaxed curled finger and hand position further, into the pocket formed by the relaxed curled hand.

The latter feature, it is respectfully submitted, is completely ignored by the Examiner in the current rejections.

Adler's drawing, Fig. 2, illustrates the mouse with attached cover with superimposed user's hand over the cover. Four fingers are shown being placed in relaxed position on the upper surface of Adler's cover wherein the palm and heel of a user's hand are shown being supported by the upper surface thereof, thereby providing contact surface with the user's hand necessary to move the mouse by the user's hand-arm motions as it is described in Adler Claim 1 (emphasis added):

1. *An improved computer mouse of a type that has a body with a generally convex upper surface, **a rear portion having an upper surface shaped to conform generally to the palm and heel of a user's hand****the mouse to be moved** about on a flat surface **by the user's hand**the improvement in combination therewith comprising* (Column 7, Lines 15-24):

a coverhaving a pair of apertures therethrough, each aperture overlaying a corresponding one of the buttons on the front portion of the mouse such that each button can be directly actuated with a finger of the user's hand."
(Column 7, Lines 36-40).

Thus, the positions of the apertures in the cover are defined by the user's fingers-hand position on the cover having an upper surface of the rear portion thereof shaped to conform generally to the palm and heel of a user's hand; as it is illustrated in Adler's drawing, Fig. 2.

Adler does not teach any alternative positioning of the apertures on the cover. That means that the user is not able to vary positioning of his hand on Adler's cover, when operating the mouse with the cover.

The Examiner will appreciate that it is impossible to move even the empty Adler's cover having an upper surface of the rear portion thereof shaped to conform generally to the palm and heel of the user's hand by bending the fingers placed into the "grooves" aperture or pushing against the longitudinally depressions 46L or 46R.

Such mouse or cover supporting the weight of the user's hand cannot be moved by moving the fingers of the same hand placed into the "grooves" aperture of Adler's cover in any of four directions.

Another advantageous feature of the present disclosure, it is respectfully submitted, is consequently ignored by the Examiner.

The moulded component of the present disclosure mounted to the upper surface of the mouse button allows the user to actuate the button by a generally downward forward force applied tangential to the upper surface of the conventional mouse button (stroking like) by index or middle finger when stretching against the moulded contact surface without actuating mouse movement.

Stroking (downward forward) the upper surface of the conventional mouse over which the Adler cover is attached to the mouse body will not actuate the button of the conventional mouse.

As for the amendatory claim language of the moulded contact surface:

The positioning of the index and middle fingers on the upper angled surface of the buttons in accordance with the relaxed, natural hand position and the moulded contact surface around the fingertip are explicitly described in Claims 1 and 2.

A height of the moulded contact surface is claimed in Claims 1, 2, 29 and 30. The range of the height 182 of the upper edge of the mould measured from the lowest point 153 or 154 of the mould to the contact point 151 or 152, (see Drawings 7, 8 and 9) is given in paragraphs 0063, 0064, and 0065.

The height 181 of the lowest point 153 or 154 of the mould is claimed in Claim 8 (Drawings 7 and 9); the range is given in paragraph 0061.

The form and the width of the moulds in longitudinally cross section thereof are claimed in claims 14, 15, and 17.

Applicant submits that the amendments as presently submitted very clearly cannot be remotely disclosed, taught, or suggested in the newly cited Adler reference (or in combination with any other reference cited or identified by the Examiner).

For the reasons discussed herein, Applicant contends that the Examiner's rejections were improper and respectfully request that the present claims be passed to issuance.

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